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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,638	11/20/2001	Jonathan T. Foote	FX/A0011	1144
23910	7590	01/11/2006	EXAMINER	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			NGUYEN, LUONG TRUNG	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/989,638	Applicant(s) FOOTE, JONATHAN T.	
	Examiner LUONG T. NGUYEN	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 9-21 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,22 and 23 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/15/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, Claims 1-8, 23 and linking claim 22 in the reply filed on 11/30/2005 is acknowledged.

2. Claims 9-21 and 24 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 11/30/2005.

Claim Objections

3. Claims 22-23 are objected to because of the following informalities:

Claim 22 (line 6), "said first image adjustor" should be changed to --said image adjustor--.

Claim 22 (line 8), "and," should be changed to --and--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-7, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kumar et al. (US 5,963,664).

Regarding claim 22, Kumar et al. discloses an apparatus for producing a panoramic video (figure 1, column 3, lines 60-67), comprising:

a camera array including plurality of cameras (array cameras 104₁, 104₂, figure 1, column 4, line 56 to column 5, line 17);

an image obtaining device (cameras 104₁, 104₂, figure 1, column 4, line 56 to column 5, line 17), wherein said image obtaining device obtains a first image from a first camera in said camera array and a second image from a second camera in said camera array, wherein said first image and second image include a common field of view;

an image adjustor (image processing system 100, figures 1-2, 6, column 9, line 65 to column 10, line 24), wherein said image adjustor adjusts at least a portion of said first image to reduce an image disparity between said common field of view of said first image and said second image;

an image combiner (image processing system 100, figure 1, column 4, line 56 to column 5, line 17), wherein said image combiner combines at least a portion of said first image and at least a portion of said second image.

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Regarding claim 23, Kumar et al. discloses said image adjustor adjusts at least a portion of said first image by shifting said first image a first distance (image processing system 100 combines images and provides image alignment, column 5, lines 10-15, column 9, line 65 to column 10, lines 24; this indicates that the image processing system 100 adjusts at least a portion of said first image by shifting said first image a first distance).

As for claims 1-2, claims 1-2 are method claims of apparatus claims 22-23. Therefore, see examiner's comments regarding claims 22-23.

Regarding claim 4, Kumar et al. discloses adjusting said second image to reduce said image disparity between said common field of view of said first image and said second image (reduce the residual displacement between two images, figure 4, column 8, lines 20-67).

Regarding claim 5, Kumar et al. discloses the step of adjusting said second image includes shifting said second image a second distance (image processing system 100 combines images and provides image alignment, column 5, lines 10-15, column 9, line 65 to column 10, lines 24; this indicates that the image processing system 100 adjusts said second image includes shifting said second image a second distance).

Regarding claim 6, Kumar et al. discloses said second distance is a distance where the image disparity is reduced (reduce the residual displacement between two images, figure 4, column 8).

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Regarding claim 7, Kumar et al. discloses warping said first image and said second image into a common coordinate system of a composite image subsequent to said step of obtaining (warping process, figure 3, column 5, line 63 to column 6, line 25).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (US 5,963,664) in view of Amano et al. (US 5,287,093).

Regarding claim 8, Kumar et al. fails to specifically to disclose cross-fading said common field of view of said first image and said second image, subsequent to said step of adjusting. However, Amano et al. teaches an image processor, which produces a cross-faded image from first and second image data (see abstract, column 2, lines 1-28, lines 38-67, figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Kumar et al. by the teaching of Amano et al. in order to provide an apparatus, which has the capability of producing a special effect, particular cross fade, during the visual display of image data (column 1, lines 9-11).

Allowable Subject Matter

8. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Braun et al. (US 5,187,571) discloses television system for displaying multiple views of a remote location.

Konolige et al. (US 6,545,702) discloses method and apparatus for panoramic imaging.

Katayama et al. (US 2003/0035047) discloses image processing method, apparatus and memory medium therefor.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NGOCYEN VU can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN
01/08/06



LUONG T. NGUYEN
PATENT EXAMINER